

Figure 1B Two-beam interference recording

$$\longleftrightarrow \Lambda = \lambda / (\sin \theta_1 + \sin \theta_2)$$



Figure 1C Grating after development

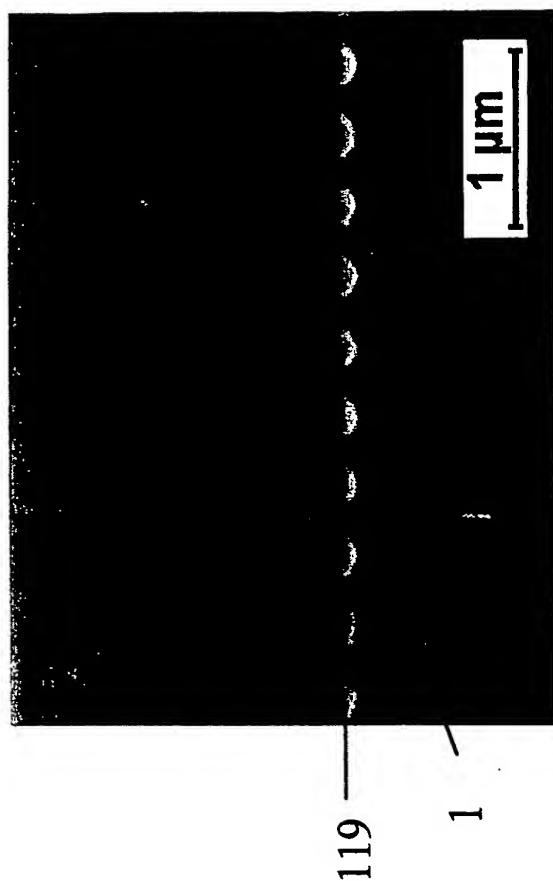


Figure 2A

Figure 2B

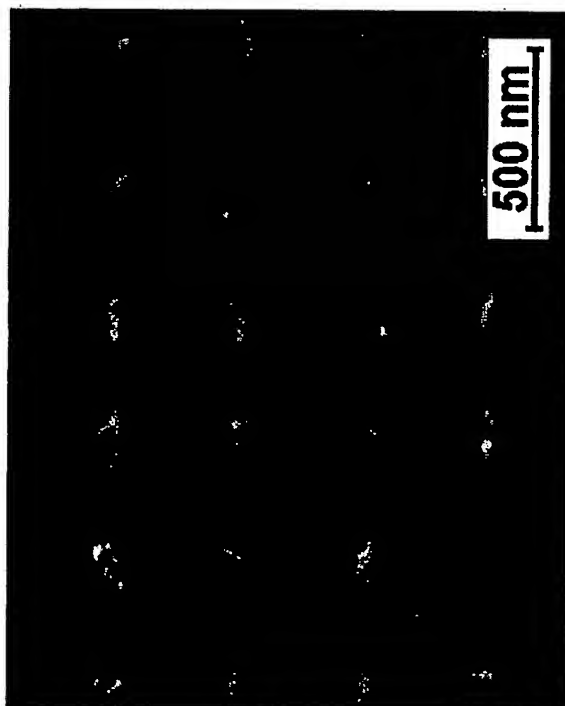
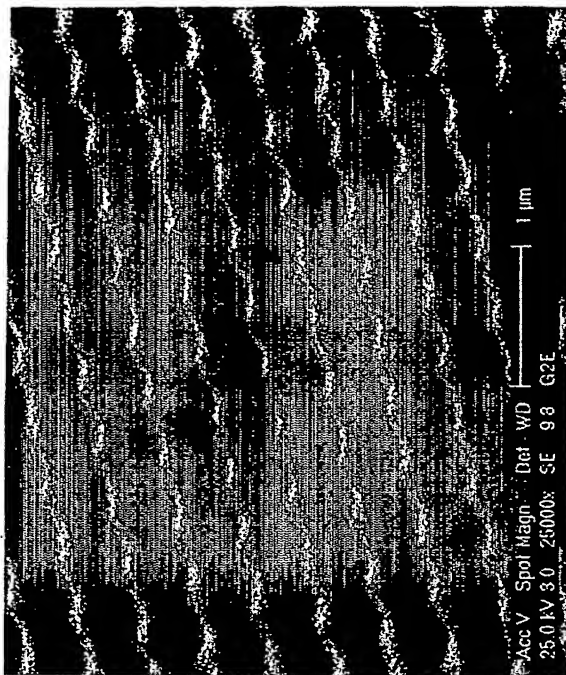


Figure 2C



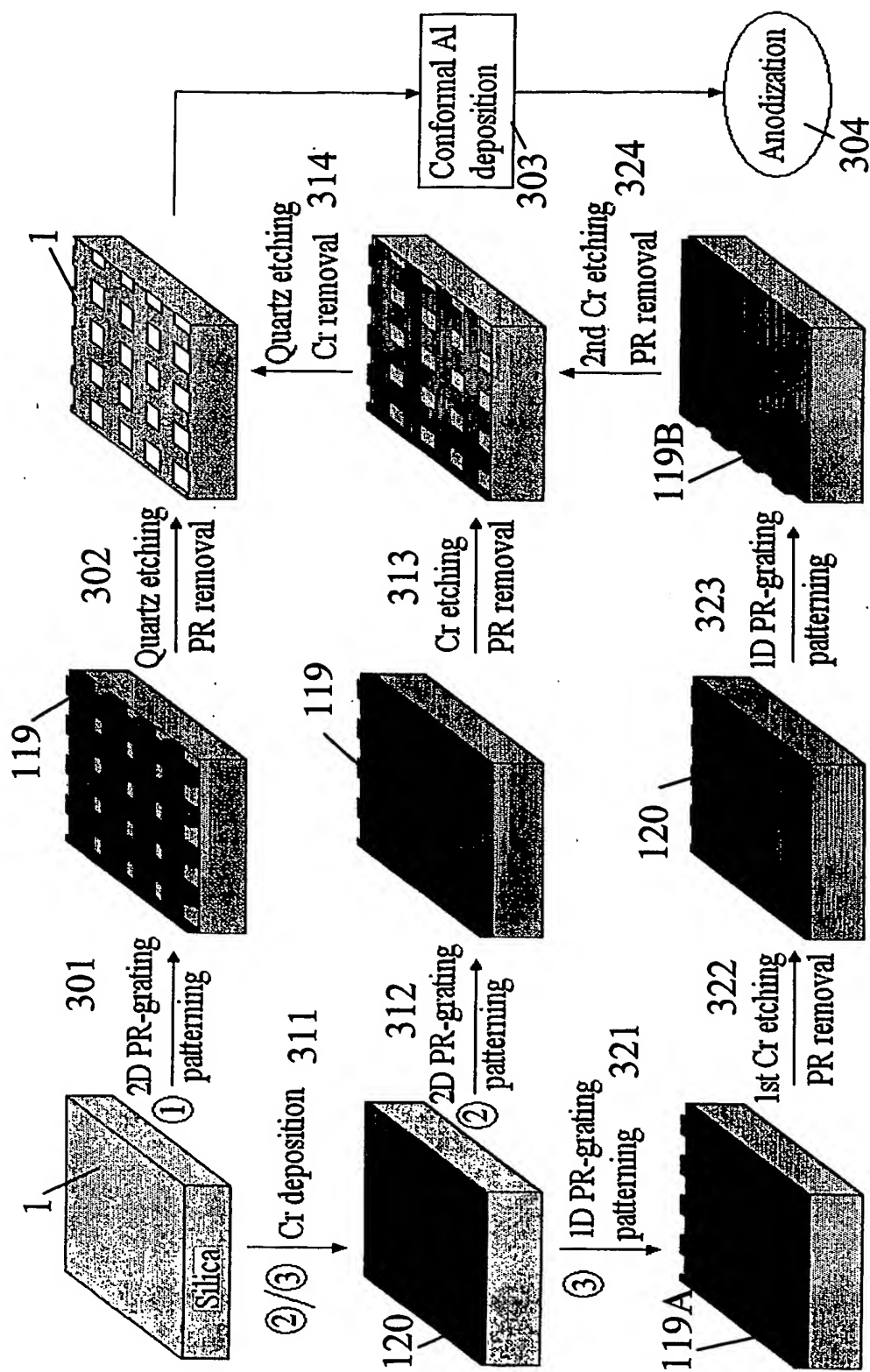


Figure 3A

Figure 3B

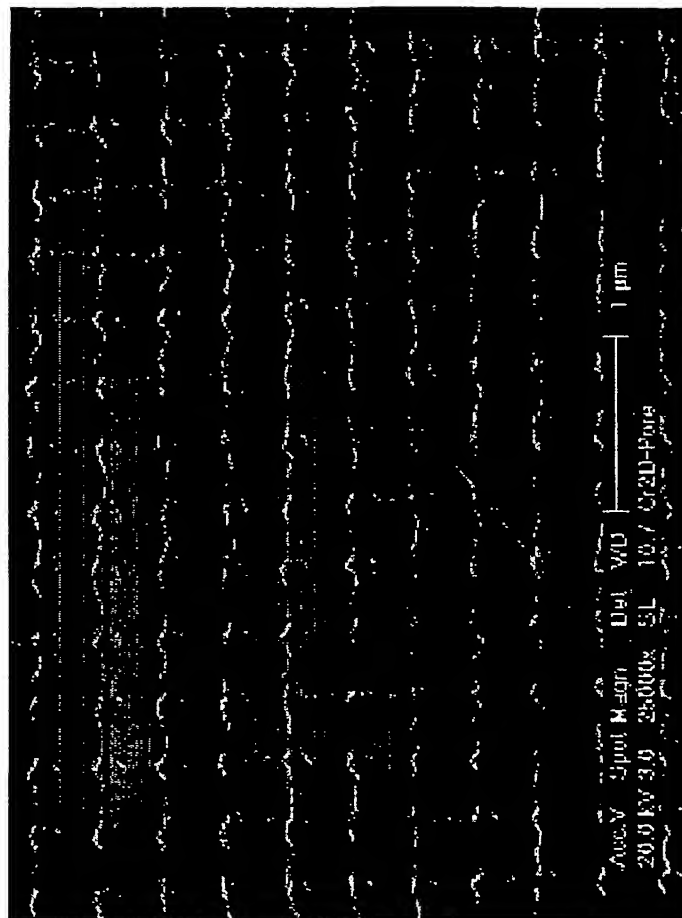
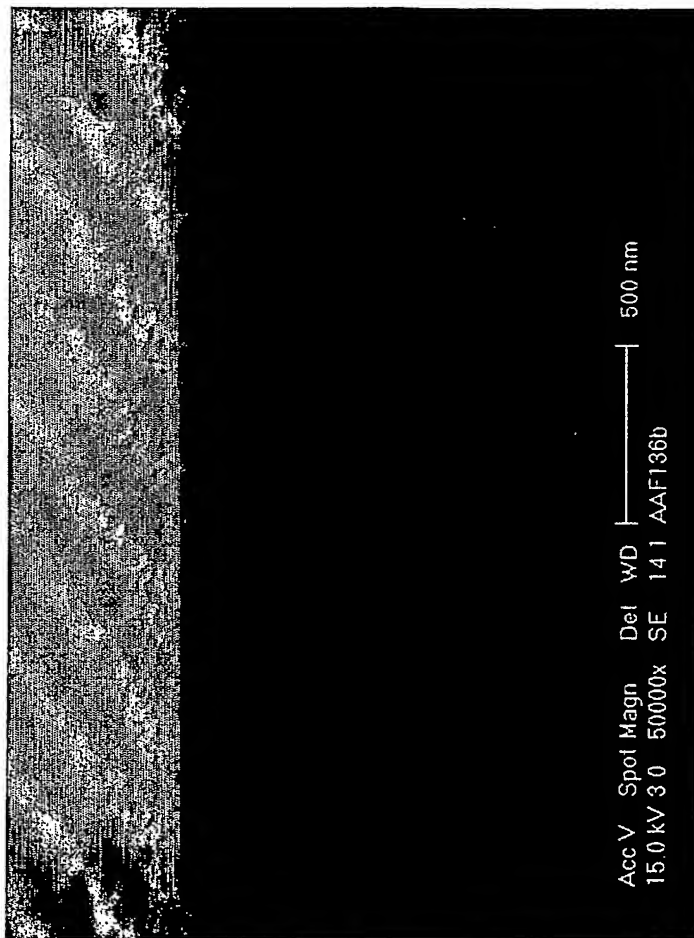


Figure 3C



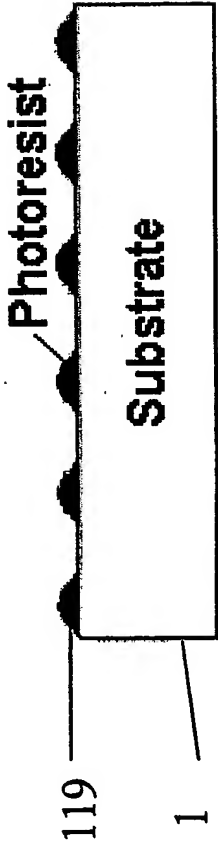


Figure 4A



Figure 4B

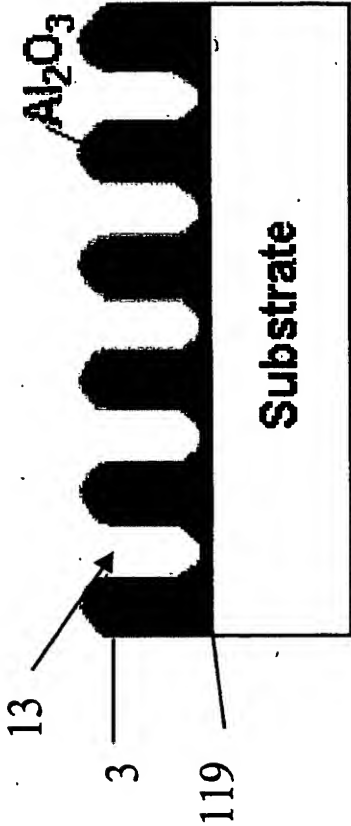
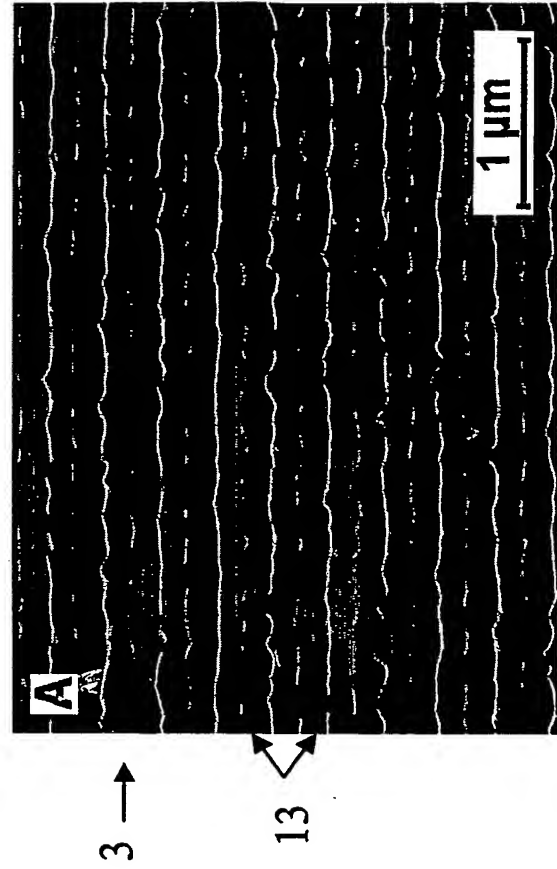


Figure 4C

Figure 4D



Figure 4E



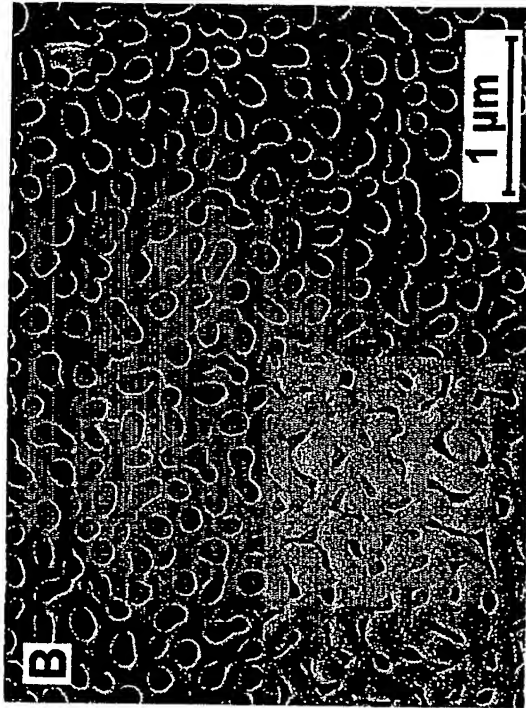


Figure 4F
PRIOR ART

Figure 5B



Figure 5C

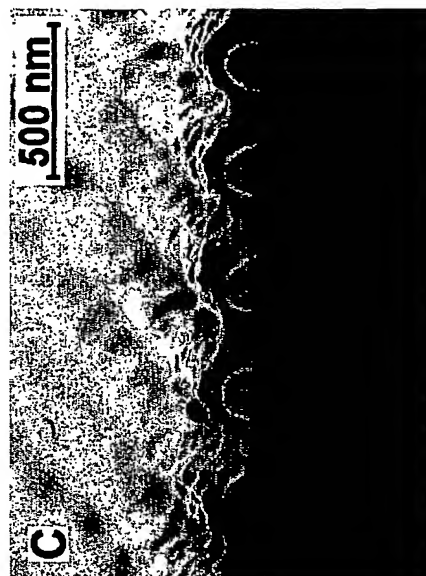


Figure 5A

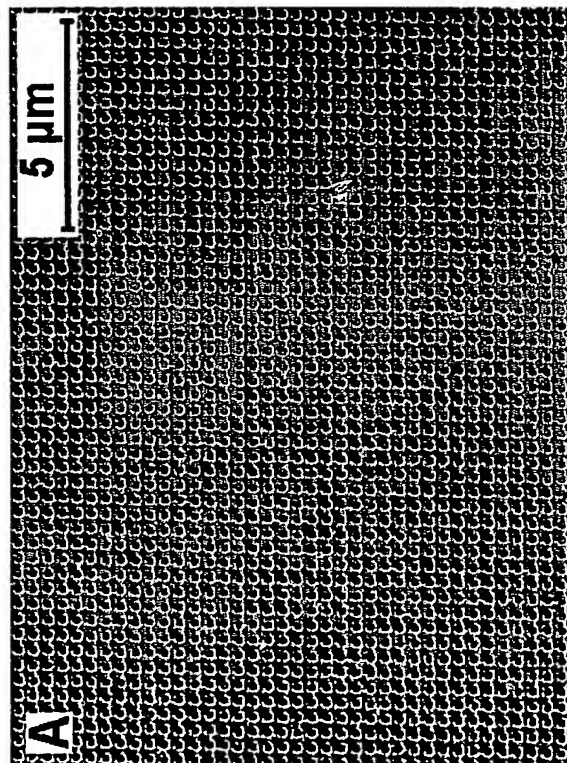
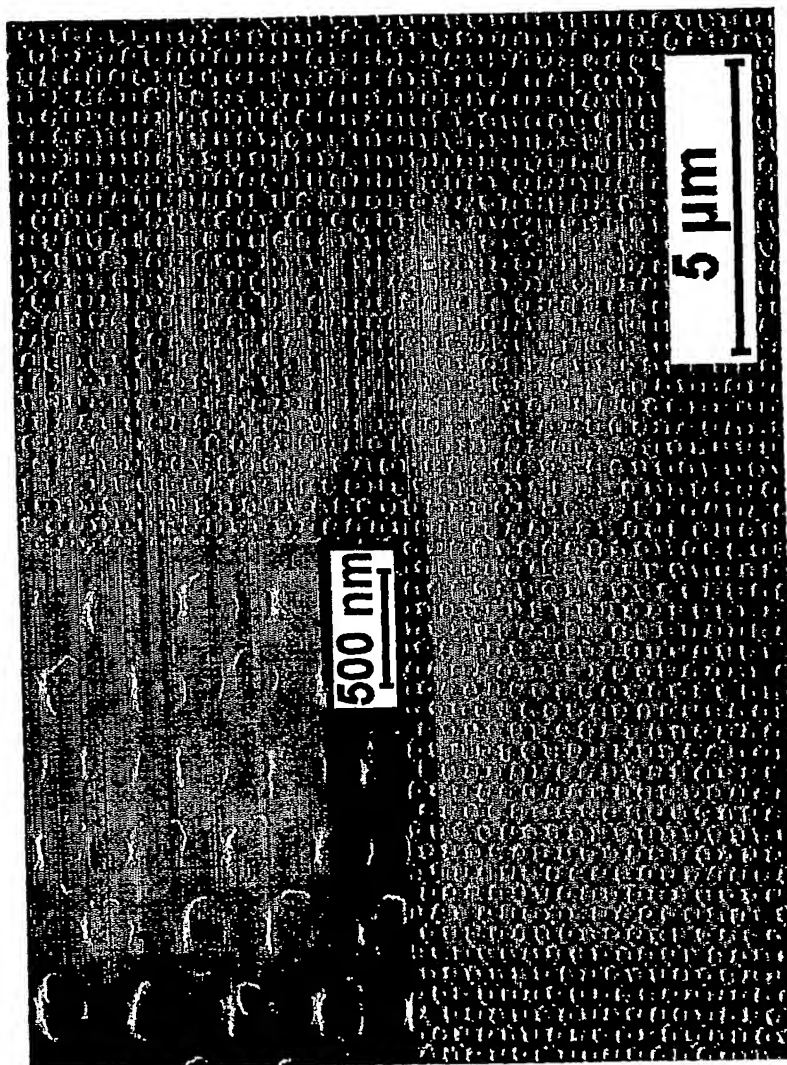


Figure 5D



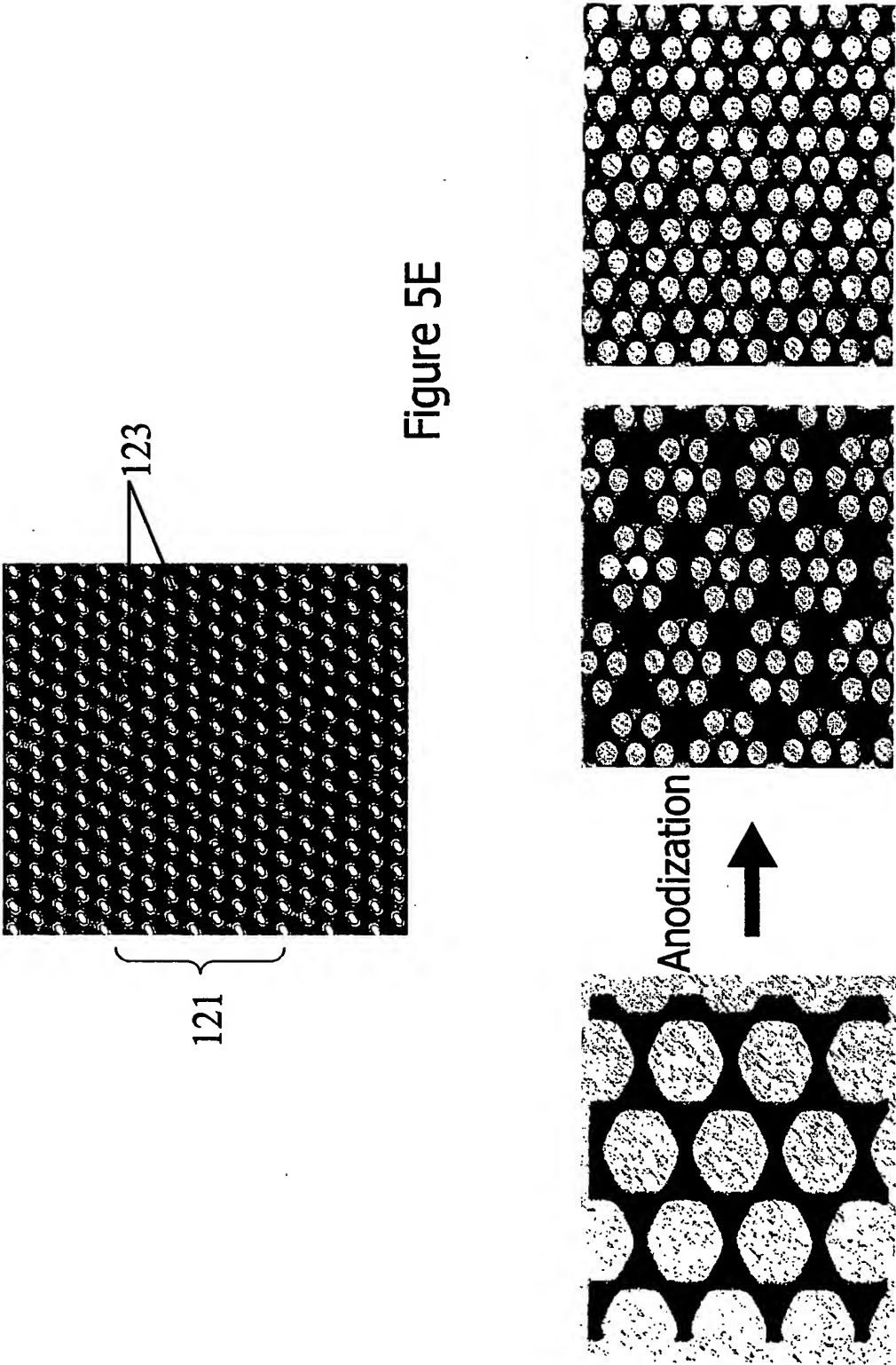


Figure 5E

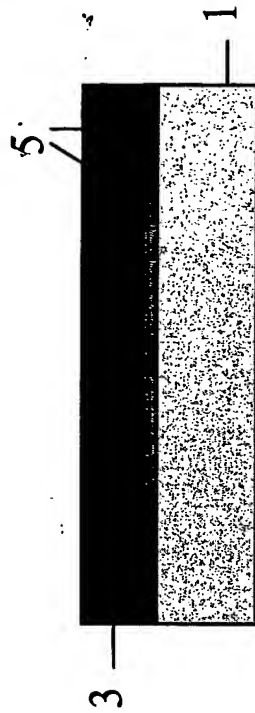


Figure 6A

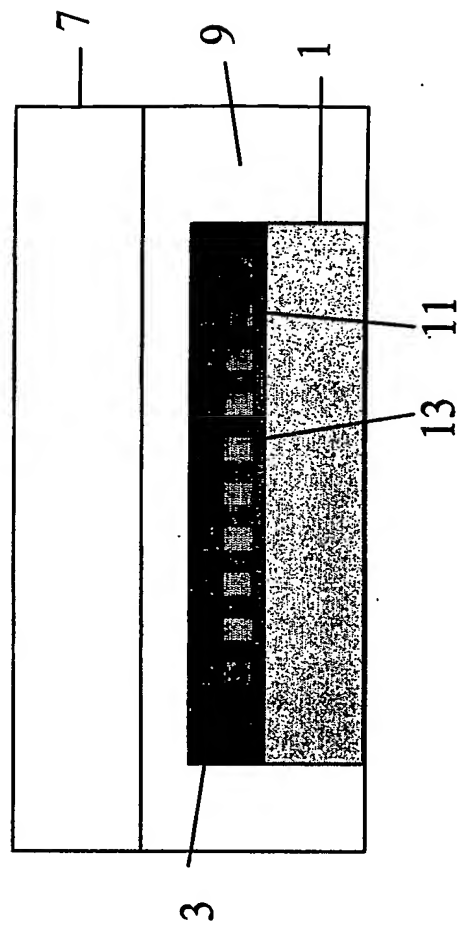


Figure 6B

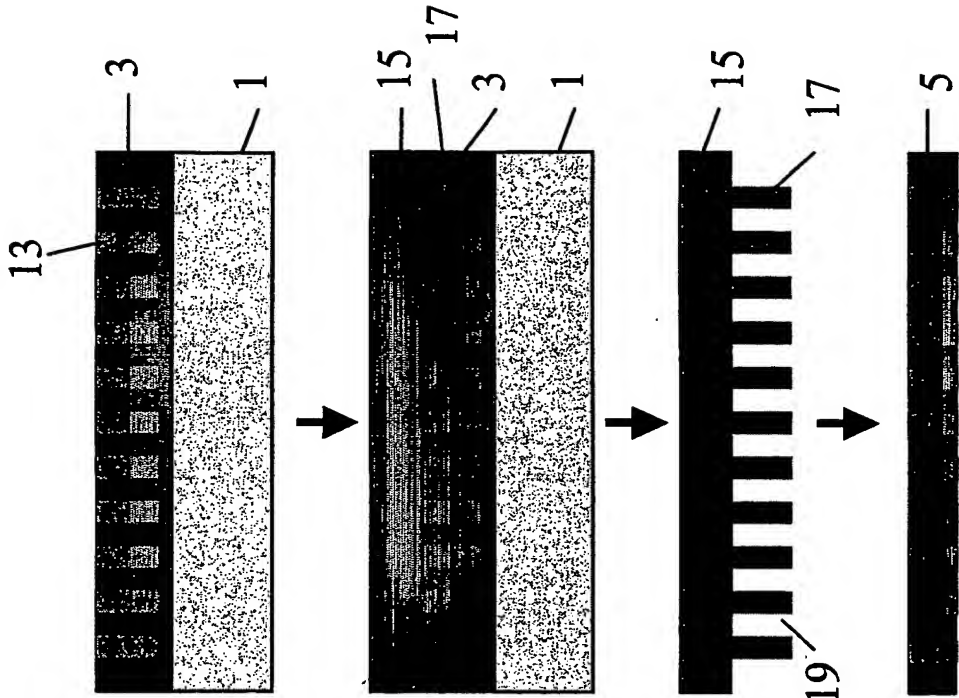


Figure 7A

Figure 7B

Figure 7C

Figure 7D

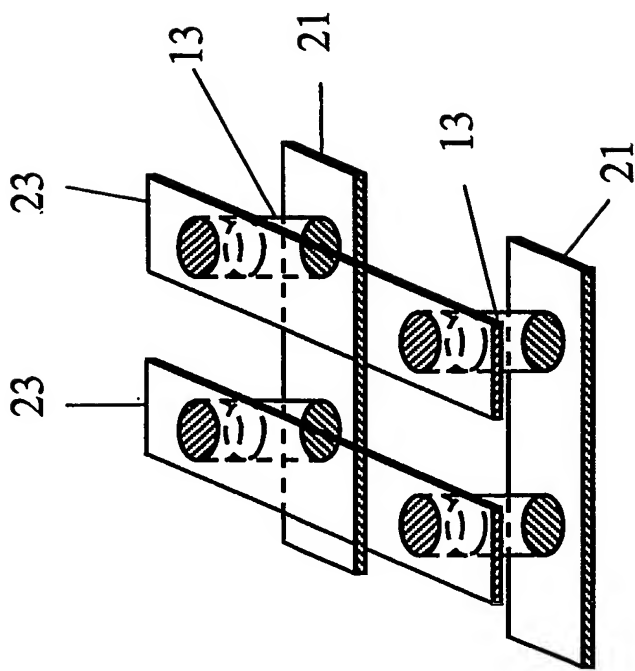


Figure 8

Figure 9B

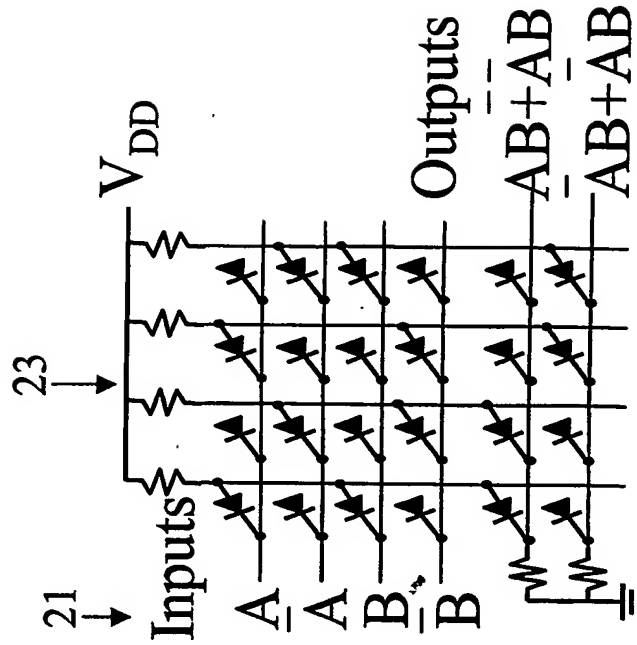


Figure 9A

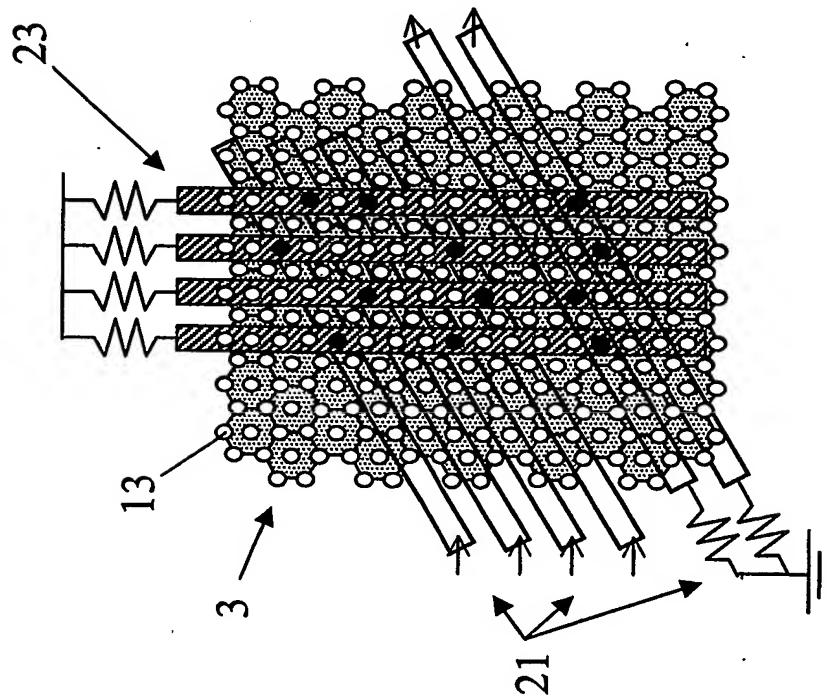


Figure 10

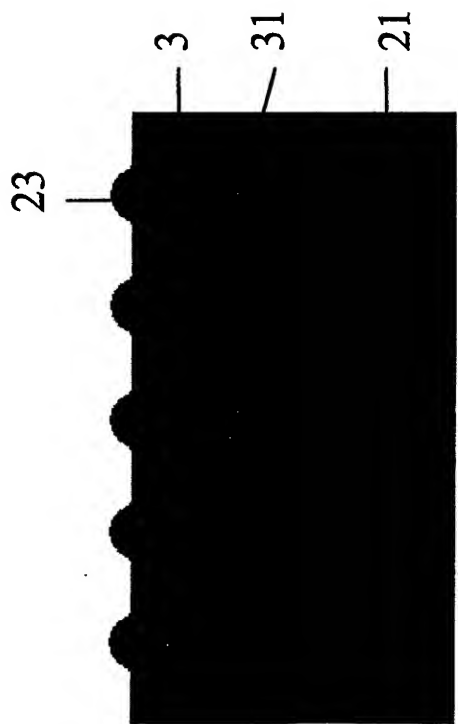
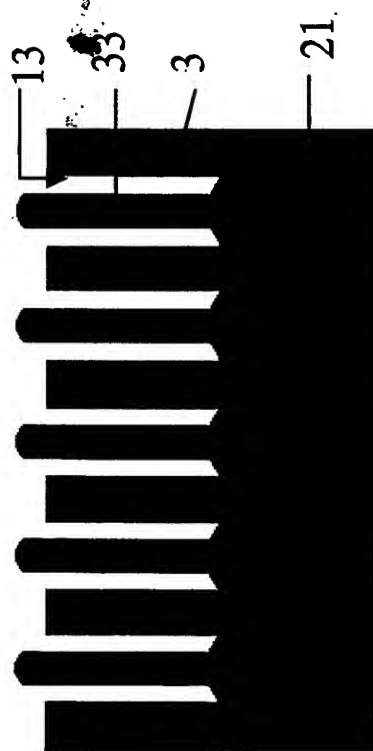


Figure 11



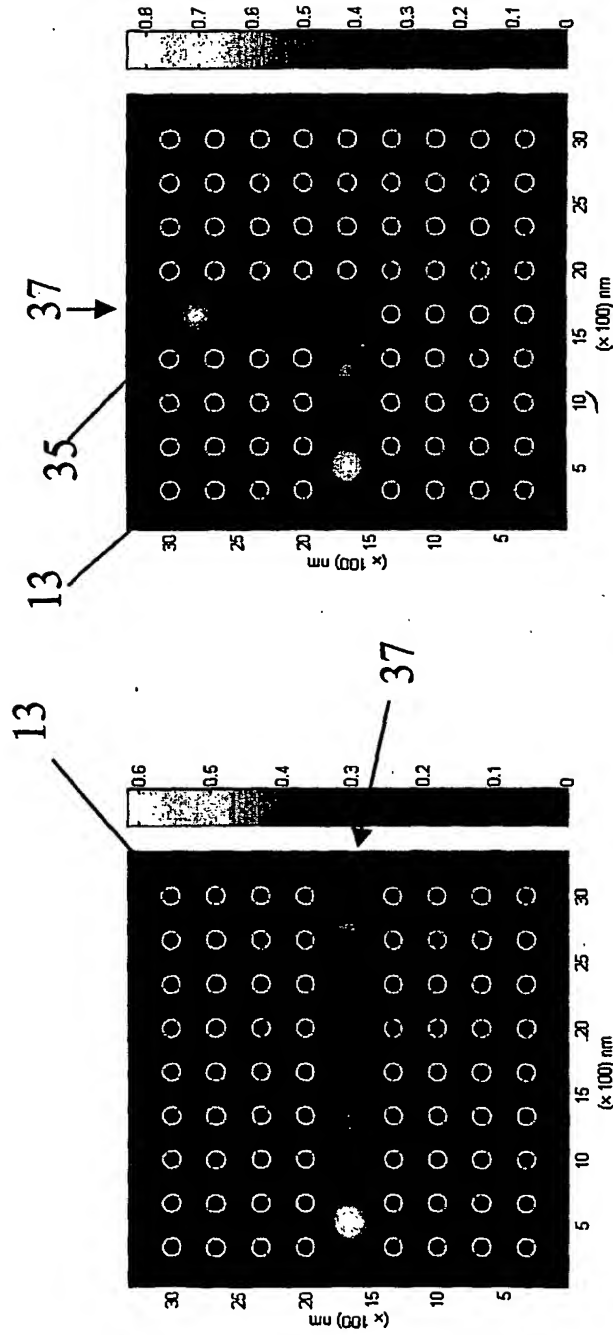
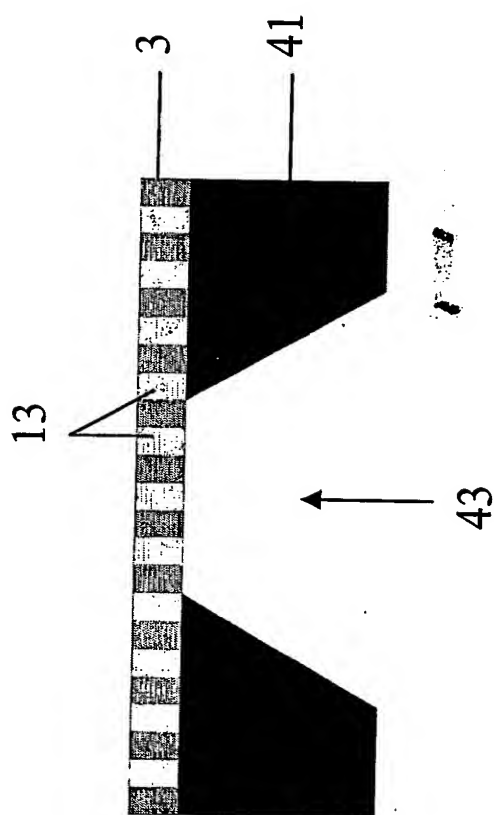


Figure 12A

Figure 12B

Figure 13



**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.